



A.D. 1871, 23rd JANUARY. N^o 167.

SPECIFICATION

OF

BENJAMIN JAMES BING.

SECURING ARTIFICIAL TEETH.

LONDON:

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25, SOUTHAMPTON BUILDINGS, HOLBORN.

1871.



A.D. 1871, 23rd JANUARY. N° 167.

Securing Artificial Teeth.

LETTERS PATENT to Benjamin James Bing, of St. Mary's County, State of Maryland, in the United States of America, but now residing at No. 15, Finsbury Place, South, in the County of Middlesex, Doctor of Dental Surgery, for the Invention of "**IMPROVED MEANS FOR SECURING ARTIFICIAL TEETH IN THE MOUTH.**"

Sealed the 14th July 1871, and dated the 23rd January 1871.

PROVISIONAL SPECIFICATION left by the said Benjamin James Bing at the Office of the Commissioners of Patents, with his Petition, on the 23rd January 1871.

I, BENJAMIN JAMES BING, of St. Mary's County, State of Maryland,
5 in the United States of America, but now residing at No. 15, Finsbury Place, South, in the County of Middlesex, Doctor of Dental Surgery, do hereby declare the nature of the said Invention for "**IMPROVED MEANS FOR SECURING ARTIFICIAL TEETH IN THE MOUTH,**" to be as follows:—

The object of the Invention is to effect the security and permanent
10 fixture of artificial teeth in the mouth without the necessity of employing

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plates, clasps, hooks, or pivots. For this purpose the artificial tooth or teeth are connected to those adjoining by a metallic band or bar or metallic bands or bars, the ends of which are passed into holes which may already exist or are drilled for the purpose of receiving them in such adjoining teeth or their roots, and these ends are there held by the 5 ramming therein of gold used in "stopping" teeth, or other suitable cement. In some cases the artificial teeth may be connected to these metallic bands or bars by rivetting, clipping, or otherwise, or the bands or bars may be passed through or over portions of the artificial teeth. By these means are obtained security and strength with other advantages. 10

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Benjamin James Bing in the Great Seal Patent Office on the 21st July 1871.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, BENJAMIN JAMES BING, of St. Mary's County, State of Maryland, in the United 15 States of America, but now residing at No. 15, Finsbury Place, South, in the County of Middlesex, Doctor of Dental Surgery, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-third day of January, in the year of our Lord One thousand eight hundred and seventy-one, in the 20 thirty-fourth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Benjamin James Bing, Her special licence that I, the said Benjamin James Bing, my executors, administrators, and assigns, or such others as I, the said Benjamin James Bing, my executors, administrators, and assigns, should at any 25 time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "**IMPROVED MEANS FOR SECURING ARTIFICIAL TEETH IN THE MOUTH**," upon 30 the condition (amongst others) that I, the said Benjamin James Bing, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the 35

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Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Benjamin James Bing, do hereby declare the nature of the said Invention, and in what manner the same is
5 to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

The object of the Invention is to effect the security and permanent fixture of artificial teeth in the mouth without the necessity of employing plates, clasps, hooks, or pivots. For this purpose the artificial tooth or
10 teeth are connected to those adjoining by a metallic band or bar, or metallic bands or bars, the ends of which are passed into holes which may already exist or are drilled for the purpose of receiving them in such adjoining teeth or their roots, and these ends are there held by the ramming therein of gold used in “stopping” teeth, or by other suitable
15 cement.

In some cases the artificial teeth may be connected to these metallic bands or bars by rivetting, clipping, or otherwise, or the bands or bars may be passed through or over portions of the artificial teeth. By these means are obtained security and strength with other advantages.

20 But that the Invention may be fully understood I will, by the aid of the accompanying Drawings, proceed to describe means pursued by me in carrying the same into effect.

DESCRIPTION OF THE DRAWINGS.

Figure 1 shows a front view and Figure 2 a back view of three
25 artificial teeth *a*, *a*, *a*, connected to a band of metal *b* (but the number may be varied) for the purpose of being connected to other teeth in the mouth. The band *b* is connected to the teeth *a* by rivets and cement, or otherwise, as may be found most convenient; but in order to carry out my Invention the band *b* is provided with projecting horns *b*¹, which
30 are shown turned downwards, so as to be passed downwards into holes which may already exist, or which may be formed for them in the adjoining natural teeth or parts thereof, and when these ends have been thus passed into such holes they may be held securely there by the ramming in with them of gold such as used by dentists for stopping
35 teeth, or by the aid of other suitable cement.

Figure 3 shows an external view of teeth thus applied, and Figure 4 shows a view of the same from the inside of the mouth. *c*, *c*, represent

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the natural teeth. In place of the ends b^1 being turned downwards or towards the gums they may be turned and passed into adjoining teeth in other directions.

Figure 5 shows a side view of an artificial tooth and Figure 6 an under side view of the same, in which the metallic connecting band or bar b is secured thereto by other metallic pins d, d , which I prefer to be formed of platinum, and which are first secured in the artificial tooth, and the projecting ends of these pins d are then turned down over a band or bar b and soldered thereto, as shown by Figures 7 and 8. When a band or bar b has been thus secured to the tooth, or it may be to a series of them, it is connected to adjoining natural teeth or parts thereof by the ends of the bar b being passed into holes existing or provided for them in such adjoining teeth, and by those holes being then filled up, thus securing the ends of the bar b by the ramming therein of gold or other suitable stopping cement; an illustration of this arrangement of fixing is shown by Figure 9. 5 10 15

In place of the band or bar b being secured to the tooth by pins from the tooth turned down on such bar, the connection of the tooth or teeth to the bar may be by rivetting.

Figures 10 and 11 shew by front and side views a modification of my improvements, in which connecting bars e, e , which I prefer to form of platinum, are obtained by the artificial tooth being formed on or applied to the ends thereof. 20

Figures 12, 13, and 14 show a modification of this last arrangement, in which the artificial tooth is formed with a groove f in each of its sides to receive the bars or pins e when they are turned down therein. This arrangement is particularly applicable to connecting the tooth to another bar along the bottom to facilitate the connection thereof to adjoining natural teeth or the stump thereof, and is particularly applicable when fixing very short teeth. 25 30

Figures 15 and 16 show by plan view and a view from the inside of the mouth an arrangement in which the connecting bar b passes over the top of the artificial tooth to hold it in position by the ends of such bar b being passed and held tightly by gold or other suitable cement in holes formed for them in the natural teeth c, c . 35

Figures 17 and 18 show two views of this bar b separately.

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It will, however, be readily understood that the arrangements may be otherwise varied, and bars so applied to artificial teeth may be used as means of connection thereof to metallic mouth plates.

Having thus described my Invention, and means which I adopt in
5 carrying the same into effect, I would have it understood that I do not
confine myself to the precise arrangements shown and described, as the
same may be varied without departing from the peculiar character of
my Invention ; but what I claim is, the securing artificial teeth to other
teeth, or parts thereof, in the mouth by means of bars applied and held
10 substantially as described.

In witness whereof, I, the said Benjamin James Bing, have here-
unto set my hand and seal, this Sixth day of July, in the year
of our Lord One thousand eight hundred and seventy-one.

BENJAMIN JAMES BING. (L.S.)

LONDON :

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Printers to the Queen's most Excellent Majesty. 1871.

FIG. 4.

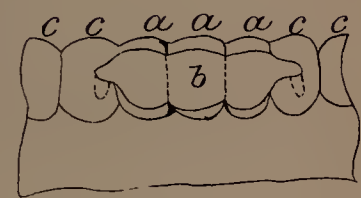


FIG. 2.



FIG. 1.



FIG. 3.



FIG. 10. FIG. 11.

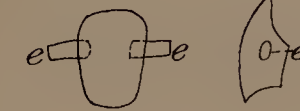


FIG. 12.



FIG. 13. FIG. 14.



FIG. 9.

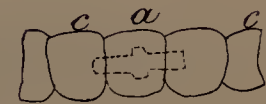


FIG. 6. FIG. 5.



FIG. 7.



FIG. 8.



FIG. 15.

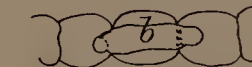


FIG. 17.

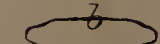


FIG. 18.

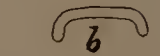


FIG. 16.



The filed drawing is partly colored.

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